

Project Management Indicator Species Report

Pine Horse Valley Roadside Hazard Tree Removal Project

Upper Lake Ranger District

Mendocino National Forest

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Introduction

The purpose of this report is to evaluate and disclose the impacts of the Pine Horse Valley Roadside Hazard Tree Removal Project on the habitat of the thirteen (13) Management Indicator Species (MIS) identified in the Mendocino National Forest Land and Resource Management Plan (LRMP) (USDA 1995). This report documents the effects of the proposed action and alternatives on the habitat of selected project-level MIS. Detailed descriptions of the Pine Horse Valley Roadside Hazard Tree Removal Project alternatives are found in the Categorical Exclusion NEPA document.

Direction Regarding the Analysis of Project-Level Effects on MIS Habitat

Project-level effects on MIS habitat are analyzed and disclosed as part of environmental analysis under the National Environmental Policy Act (NEPA). This involves examining the impacts of the proposed project alternatives on MIS habitat by discussing how direct, indirect, and cumulative effects will change the habitat in the analysis area.

Adequately analyzing project effects to MIS generally involves the following steps:

- Identifying which habitat and associated MIS would be either directly or indirectly affected by the project alternatives; these MIS are potentially affected by the project.
- Summarizing the bioregional-level monitoring identified in the LRMP, as amended, for this subset of MIS.
- Analyzing project-level effects on MIS habitat for this subset of MIS.
- Discussing bioregional scale habitat and/or population trends for this subset of MIS.
- Relating project-level impacts on MIS habitat to habitat and/or population trends at the bioregional scale for this subset of MIS.

These steps are described in detail in the Pacific Southwest Region's draft document "MIS Analysis and Documentation in Project-Level NEPA, R5 Environmental Coordination" (May 25, 2006) (USDA Forest Service 2006). This Management Indicator Species (MIS) Report documents application of the above steps to select project-level MIS and analyze project effects on MIS habitat for the Pine Horse Valley Roadside Hazard Tree Removal Project.

Selection of Project level MIS

Management Indicator Species (MIS) for the Mendocino NF are identified in the LRMP (1995). The habitats and ecosystem components and associated MIS analyzed for the project were selected from this list of MIS, as indicated in Table 1. In addition to identifying the habitat or ecosystem components (1st column), the associated MIS (2nd column), the Table discloses whether or not the habitat of the MIS is potentially affected by the Deer Valley Meadow Enhancement Project (3rd column).

Table 1. Selection of MIS for Project-Level Habitat Analysis for the Deer Valley Meadow Enhancement Project.

Habitat or Ecosystem Component	Mendocino NF Management Indicator Species <i>Scientific Name</i>	Category for Project Analysis ¹
Snags	Acorn Woodpecker, Douglas tree squirrel, fisher, northern goshawk, marten, pileated woodpecker, northern spotted owl	3
Hardwoods	Acorn Woodpecker, black tailed deer, Douglas tree squirrel, Tule elk	2
Riparian	Bald Eagle, Black tailed deer, fisher, northern goshawk, marten, peregrine falcon, Tule elk	2
Meadow	Black-tailed deer, Tule elk	2
Brush field	Black-tailed deer, California thrasher	2
Old growth	Fisher, northern goshawk, marten, pileated woodpecker, northern spotted owl	2
Dead & Down	Fisher, northern goshawk, marten, pileated woodpecker, northern spotted owl	3
Lithic areas	Peregrine Falcon	2

The MIS whose habitat would be either directly or indirectly affected by the Pine Horse Valley Roadside Hazard Tree Removal Project, identified as Category 3 in Table 1, are carried forward in this analysis, which will evaluate the direct, indirect, and cumulative effects of the proposed action and alternatives on the habitat of these MIS. The MIS selected for project-level MIS analysis for the project are: acorn woodpecker, Douglas tree squirrel, fisher, northern goshawk, marten, pileated woodpecker, and northern spotted owl. Effects to fisher, northern goshawk, marten, and northern spotted owl are discussed in more detail in the Biological Evaluation.

Category 2 species are not analyzed because the project does not remove or modify the habitats in which they are indicator species.

Description of Proposed Project

In August of 2018 the Ranch Fire moved across approximately 240,000 acres of the Mendocino National Forest. Thus, large areas of fire killed trees, many of which are adjacent to forest roads, pose a hazard to our forest users. In order to mitigate this risk and maintain our roads the forest is proposing to remove trees that pose as hazards along roads which access private inholdings and other areas the public and National Forest employees need immediate access. There is about 44 miles of road within the Pine Horse Valley Roadside Hazard Tree Removal project.

¹ **Category 1:** MIS whose habitat is not in or adjacent to the project area and would not be affected by the project.

Category 2: MIS whose habitat is in or adjacent to project area, but would not be either directly or indirectly affected by the project.

Category 3: MIS whose habitat would be either directly or indirectly affected by the project.

Hazard tree abatement is a form of road maintenance required for safe travel by the public and for administrative uses. A 200' buffer on each side of the roads will be used in order to compensate for at least one and a half tree heights of standing dead trees that have a chance of striking the roads when they fall. The purpose of this project is to maintain our road system and promote safe travel and uncompromised ingress and egress on priority roads. Some of this work may be accomplished by salvage harvesting commercial trees that are hazards from fire-induced mortality that make them a threat to health and human safety (Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin 2012)). Hazard trees that are not able to be removed by commercial harvest will be either cut and left in place or cut and removed by other means.

Proposed Action

Hazard tree abatement is a form of road maintenance required for safe travel by the public and for administrative uses. A 200' buffer on each side of the roads will be used in order to compensate for at least one and a half tree heights of standing dead trees that have a chance of striking the roads when they fall. The purpose of this project is to maintain our road system and promote safe travel and uncompromised ingress and egress on priority roads. Some of this work may be accomplished by salvage harvesting commercial trees that are hazards from fire-induced mortality that make them a threat to health and human safety (Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin 2012)). Hazard trees that are not able to be removed by commercial harvest will be either cut and left in place or cut and removed by other means.

Silviculture proposed actions

The purpose and need of the silvicultural treatments in the Pine Horse Valley project is to remove current and potential future hazard trees where they exist along roadsides. Effective fuels reduction will also be a beneficial incidental outcome from the proposed activities.

It is important to emphasize that in order to reduce exposure along roadsides, along with the importance of keeping our roads open, that the marking guides utilize the lower probability of mortality threshold since it is imperative that we prevent leaving additional trees that may die.

Direct action is guided by the Mendocino National Forest Land and Resource Management Plan (1995) for matrix lands and late successional reserves.

Selection criteria for trees, management requirements, and mitigation measures, and fuels proposed actions can be found in categorical exclusion document for the Pine Horse Valley HTA project.

Effects of Proposed Project on the Habitat for the Selected Project-Level MIS.

The following section documents the analysis for the following 'Category 3' species: acorn woodpecker, Douglas tree squirrel, fisher, northern goshawk, marten, pileated woodpecker, and northern spotted owl. The analysis of the effects of the Pine Horse Valley Roadside Hazard Tree Removal Project on the MIS habitat for the selected project-level MIS is conducted at the project scale.

Snags

Habitat/Species Relationship.

There are several species identified in the Mendocino NF LRMP that are indicators for snag habitat: Acorn Woodpecker, Douglas tree squirrel, fisher, northern goshawk, marten, pileated woodpecker, and northern spotted owl. Fisher, northern goshawk, marten, and northern spotted owl are discussed in the biological evaluation for the Pine Horse Valley project.

Project-level Effects Analysis –

Habitat Factor(s) for the Analysis: Snags

Current Condition of the Habitat Factor(s) in the Project Area: Following the Ranch Fire in 2018 there is a plethora of snags on the landscape, fire killed or otherwise. Post-fire there have been acorn and pileated woodpeckers observed in the project area (personal observation).

Alternative A (Proposed Action)

Direct and Indirect Effects to Habitat.

The Pine Horse Valley Roadside Hazard Tree Removal Project removes all hazard trees that have a potential to strike a road if they were to fall. Since there is not a shortage of snags on the landscape the removal of hazard trees within 200 feet of the road would not have detrimental effects on snag dependent species.

Cumulative Effects to Habitat in the Analysis Area.

Portions of the Pine Horse Valley project area were commercially treated in 2012 under the Lakeview timber harvest. The Ranch Fire also burned through this area in 2018. There are a couple private land salvage operations occurring within the Pine Horse Valley project area, too.

Cumulative Effects Conclusion:

The effects of the Pine Horse Valley project would not add to the effects of the other projects that have or will occur in the Pine Horse Valley project area.

Dead & Down

Habitat/Species Relationship.

There are several species identified in the Mendocino NF LRMP that are indicators for dead and down: fisher, northern goshawk, marten, pileated woodpecker, and northern spotted owl. Fisher, northern goshawk, marten, and northern spotted owl are discussed in the biological evaluation for the Pine Horse Valley project.

Project-level Effects Analysis –

Habitat Factor(s) for the Analysis: coarse woody debris, dead and down

Current Condition of the Habitat Factor(s) in the Project Area: The Ranch Fire likely consumed a lot of the dead and down within the project area. Trees and debris have collected since the fire but it is not likely to resemble the conditions pre-fire.

Alternative A (Proposed Action)

Direct and Indirect Effects to Habitat.

Although the Pine Horse Valley project is likely to remove a lot of dead and down from the project area there is a mitigation measure to leave a minimum of three recently downed logs per acre that are greater than 20" in diameter at the large end and greater than 10 feet in length with at least one log greater than 20 feet.

Cumulative Effects to Habitat in the Analysis Area.

Portions of the Pine Horse Valley project area were commercially treated in 2012 under the Lakeview timber harvest. The Ranch Fire also burned through this area in 2018. There are a couple private land salvage operations occurring within the Pine Horse Valley project area, too.

Cumulative Effects Conclusion:

Similar to the cumulative effects to snags, the effects of the Pine Horse Valley project would not add to the effects of the other projects that have or will occur in the Pine Horse Valley project area.

Effects of a No Action Alternative

If there were no action taken within the Pine Horse Valley project area then snag and dead and down habitats would increase in the short term. In the long term snags would fall and increase the dead and down. Increased amounts of dead and down would add to the fuel loading which could potentially increase the chance and intensity of another fire in the area.

Summary

Due to the small size of the project and the mitigation measures in place the Pine Horse Valley Roadside Hazard Tree Removal project would not have a negative effect on population trends for any of the indicator species or their habitats.

References Cited

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